

Amendments to the Abstract:

Please replace the paragraph beginning at page 83, line 7 with the following amended paragraph:

This invention provides prokaryotic β 1,4-~~N-acetylglucosaminyl (GalNAc)~~ N-acetylgalactosaminyl (GalNAc) β 1,4-N-acetylgalactosaminyl (GalNAc) transferases involved in synthesis of lipooligosaccharide (LOS). β 1,4-GalNAc transferases are obtained from, for example, *Campylobacter* species, including *C. jejuni*. In additional embodiments, the invention provides nucleic acids that encode the β 1,4-GalNAc transferases, as well as expression vectors and host cells for expressing the β 1,4-GalNAc transferases.